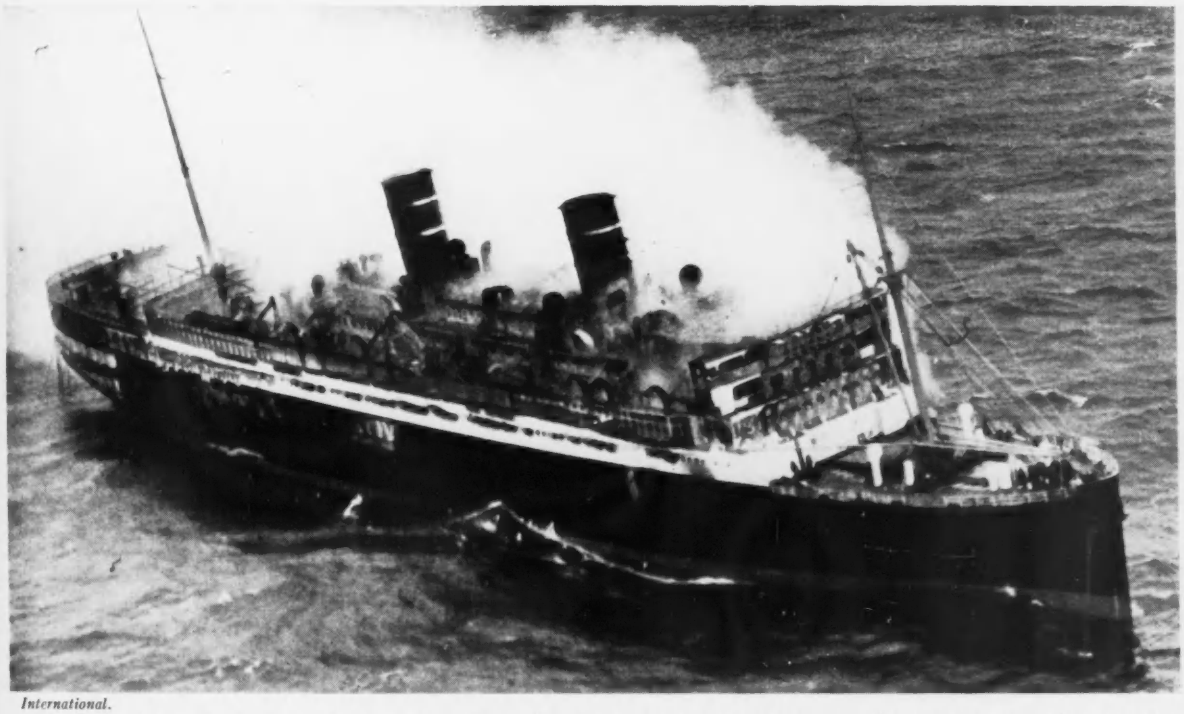
Volunteer Firemen

Professional Journal of the Volunteer Firemen's Section of the National Fire Protection Association

Volume 1, Number 13 **BOSTON, MASSACHUSETTS** **October, 1934**



International.

The Turbo-electric Liner *Morro Castle* on fire off the New Jersey coast on September 8. This air view was taken just after daybreak of the ship on which 137 persons perished in the worst marine disaster of recent years. Most of the passengers jumped from decks as smoke and fire swept through the boat toward the stern. A few of the crew may be noted finding safety in the bow.

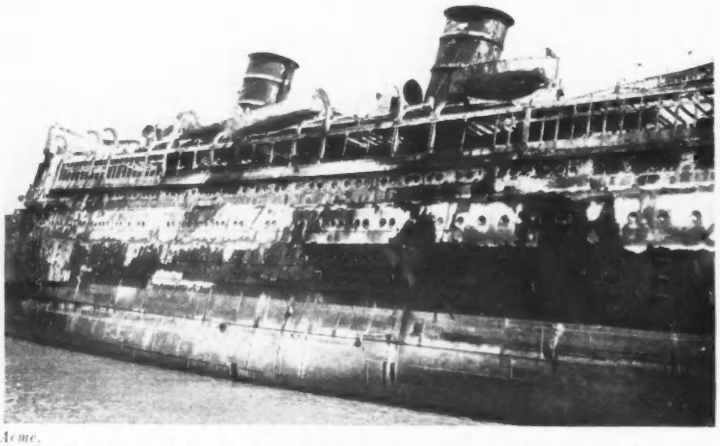
Fire On The High Seas

Liner *Morro Castle* Burns in Gale off New Jersey Coast—137 Persons Dead or Missing

THE *Morro Castle*, luxury liner returning from Havana to New York on a pleasure cruise, burned off the New Jersey Coast in the early morning hours of September 8 in the worst marine disaster of recent years. One hundred and thirty-seven persons are dead or missing of the 550 passengers and crew on board. The ship, completely burned out, is grounded on the beach at Asbury Park, N. J.

The early reports of this fire were confused and conflicting. The full story may never be known. The fundamental questions are how and why the fire started and spread so rapidly, why it was not controlled with the ship's fire fighting equipment and why the passengers and crew did not promptly take to lifeboats, and thus avoid loss of life.

The testimony of witnesses at the inquiry of the U. S. Steamboat Inspection Service, the most reliable information available as this account is written, clearly indicates that the fire was primarily chargeable to the large amount of wood and other combustible material in



Acme.

The fire-swept *Morro Castle* on the beach at Asbury Park, N. J. The extent of the fire is indicated by the discoloration of the steel hull.

the construction and furnishings, and that its spread beyond control was due to the lack either of an organized fire fighting force or automatic fire protection equipment.

The *Morro Castle* was built in 1930 at a cost of $5,500,000. Like most passenger vessels, even of most recent construction, although the hull was of steel, there was a large proportion of wooden and other combustible construction in the superstructure. Stateroom partitions were of wood and the lounges, dining rooms and other public rooms had elaborate decorative finish and trim of a combustible character. Furnishings were also elaborate and, of course, combustible so that there was no lack of fuel for a fire.

The arrangement of the ship had most of the usual defects which permit a fire to spread rapidly from its point of origin. The main stairways were open from deck to deck. Fire-retarding partitions with fire doors were provided at intervals along each deck, but the doors required manual operation.

The construction and fire equipment were in accordance with current good practice for ship design at the time the vessel was built. The ship's hold was protected by a carbon dioxide gas fire extinguishing system. Staterooms were protected by an automatic fire alarm system. There is no evidence to show that these devices did not operate as intended. For fire fighting, hand fire extinguishers were provided and hose lines supplied from a fire pump.

On the morning of September 8 the ship was approaching New York on the last night of its run from Havana. Passengers had nearly all retired to their staterooms.

A brisk fire was discovered in a locker in the writing room on the port side of B Deck which is just below the Boat or Top Deck, which had spread to involve some of the nearby furnishings and ceiling trim. The fire was attacked by an officer with an extinguisher but it proved to have extended beyond what the extinguisher could control.

Hose Lines Used

Meanwhile a member of the crew had brought up a line of hose. He got a fair stream, but the fire apparently already had spread to be beyond control of the one stream. Other hose lines were put in operation by other members of the crew and passengers, and some of these were directed on the fire through the windows of the room, which were broken for the purpose.

Those who were fighting the fire demonstrated their lack of experience in allowing so many openings to be made between the burning rooms and the outside air. Both doorways of the room also appear to have been open and with the gale of wind there was blowing there is no difficulty in accounting for the rapid spread of fire through B Deck toward the stern. Next to the writing room was an elaborately furnished lounge which extended two decks high with a mezzanine at the deck above. This allowed the fire and smoke to quickly involve two decks and spread sternward on both. The door between the writing room and lounge was a fire door but apparently no one attempted to shut it.

Even before the fire had extended very far beyond the writing room much smoke had been generated. This was sucked down through ventilators into the boiler and engine rooms. The boiler room crew had to shut down the boilers and get out within about 20 minutes of the start of the fire. It also appears that a main electric cable was burned out early in the fire and caused the lights to fail all over the ship.

Little organized effort was made by the crew to advise passengers of the fire and in the darkness and gale it is not suprising that all the elements of panic were present. The fire probably trapped some persons in staterooms as it spread. Others got out of their rooms but were driven to the after decks by either smoke or fire. In the first 20 minutes both of the main stairways, fore and aft, were cut off by smoke or fire. The failure of passengers to reach lifeboats, even if they had known how to get to them or had been directed by members of the crew, may be explained by the fact that either smoke or fire had cut off all stairways to which passengers had access leading to the Top or Boat Deck where the lifeboats were located.

Half to three-quarters of an hour after the fire was reported to the bridge, an S O S signal was sent out. There was considerable shipping in that neighborhood and several ships were soon nearby to render aid. The rapid spread of fire, however, had driven most of the passengers and

some of the crew to the stern of the ship from which those who were still alive were forced to jump into the sea or clamber down ropes as the increasing smoke and heat became unbearable. Many of those who jumped off as rescue ships approached about daylight were picked up. Many others were drowned. A few, clinging to wreckage, reached the Jersey shore.

□ □ □ □ □

The Marine Section of the National Fire Protection Association is actively at work on the problem of fires on ships at sea. The 1933 report of the Marine Committee gives detailed recommendations for fire-resisting construction aboard vessels. Automatic sprinkler protection is also recommended, and a committee of the Marine Section is developing detailed provisions on sprinkler installations on vessels.

□ □ □ □ □

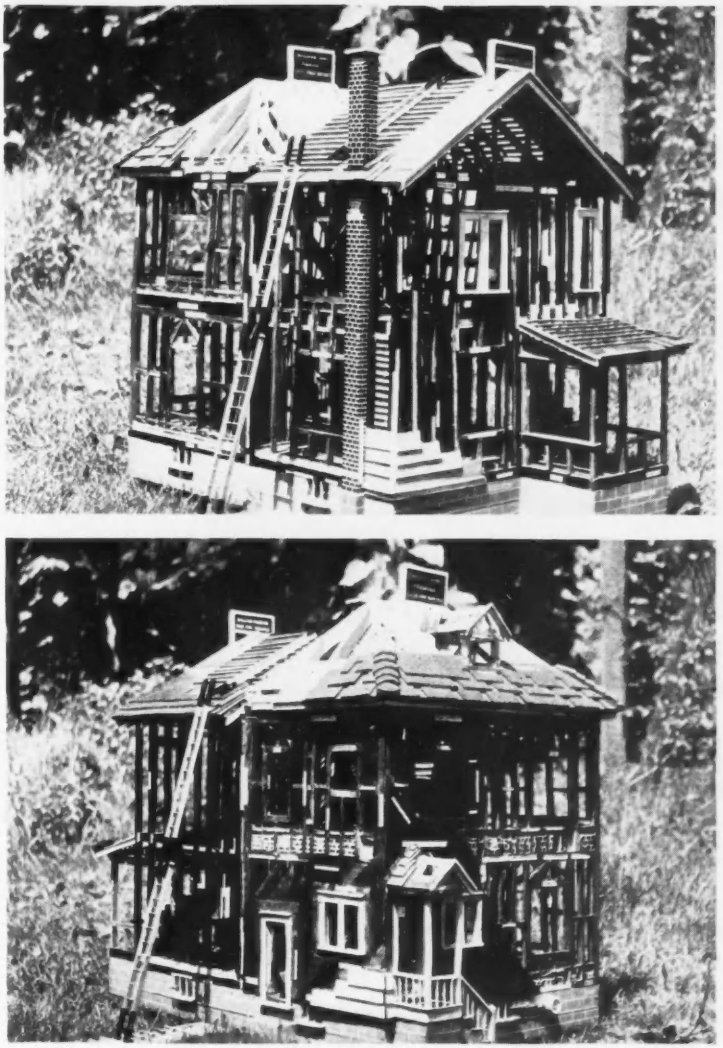
Using Model House to Put Over Building Code

The most difficult part in putting over a building code is the problem of explaining its technical features to the layman in the town, village or city board which must act on the adoption of the code. The Morris Township Volunteer Fire Department of Morristown, N. J. (Member N.F.P.A.) has found an effective way to demonstrate just how a building code will insure the construction of houses to live in which are safe from fire by means of a model house.

The model was constructed by Alec Green, Assistant Chief of the Morris Township Department and represents to a scale of one foot to the inch all the main structural features of a typical dwelling house. It is mounted on a platform and casters so that it may be conveniently moved about and exhibited.

The one unit shows both dangerous and safe construction features. The fire hazards are painted red and the model is electrically lighted.

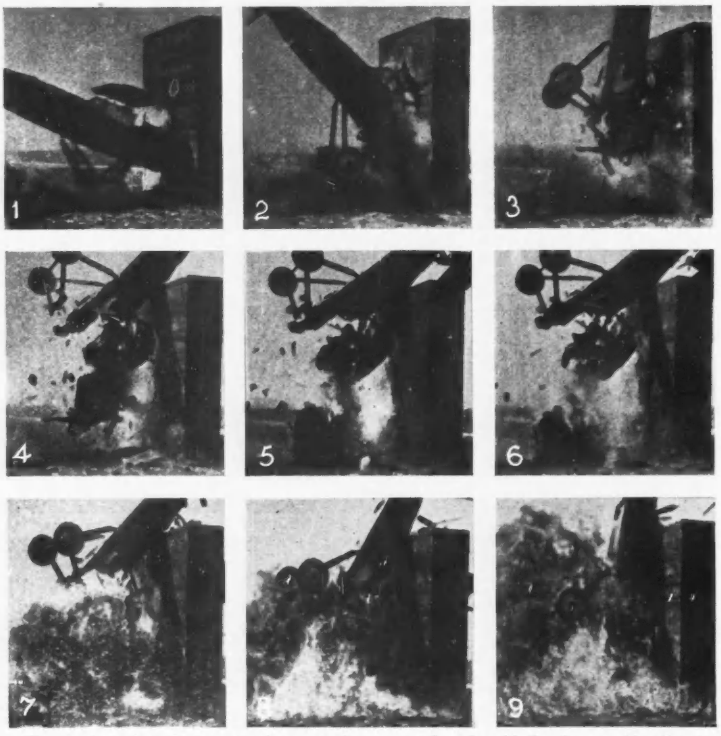
This structure has proven valuable in all sorts of educational work which the department has undertaken. It has been used as an exhibit in fire prevention campaigns. Officers of the department use it in demonstrations and lectures at monthly meetings of the department and at other gatherings of volunteers. It is used for familiarizing fire fighters with the various types of construction which may be encountered to demonstrate weaknesses for which to look out. It has also been used to review the handling of fires.



Model house of the Morris Township Volunteer Fire Department of Morristown, N. J. (Member N.F.P.A.) showing comparison of safe and unsafe types of construction. Above, rear view of dwelling, showing wood shingles, ordinary balloon framing without fire stopping, and other defects. Below, safe construction, such as a building code would require, with fire retardant roofing and substantial framing with fire stopping.

Fire Prevention Wins for Maryland Volunteers

In a state-wide competition the volunteer fire department of Ellicott City, Maryland, has been awarded the prize for the best fire prevention program put on during the year by a volunteer fire department. C. Howard Whipple, Chairman of the Fire Prevention and Fire Inspection Committee of the Maryland State Firemen's Association, was in charge



To study what happens when airplanes crash, the U. S. Army Air Service coasted old planes down an incline into a wall. From a study of high speed motion pictures of the crashes airplane construction safer from fire is being developed.

of the contest. The prize was a silver loving cup presented for the purpose by Mayor Howard W. Jackson of Baltimore. Mayor Jackson offered the prize at the meeting a year ago of the Maryland State Firemen's Association under whose auspices the contest was held.

The Ellicott City department is a member of the Howard County Volunteer Firemen's Association and serves the city of 1,216 population and the surrounding community. The city has no fire prevention ordinances or building code. The principal features of the program which won the contest for the Ellicott City department are listed following and constitute a fire prevention program of which any volunteer department may be proud.

1. Posted fire prevention posters in every public building.
2. Distributed fire prevention literature to all schools and churches.
3. Provided three displays in the business section showing the fire hazards of homes and places of business.
4. Gave seven public demonstrations on how to prevent fires and the proper extinguishers to use on various types of fires.
5. Asked the pastors of churches to deliver fire prevention talks.
6. Secured an out of town speaker to address the high school pupils on fire prevention.
7. Gave four fire prevention talks in the rural sections of the county.
8. Issued special Fire Prevention Week stamps. Citizens used them on their mail.
9. Secured wide publicity through the co-operation of the city's weekly newspaper.
10. Inspected the 70 places where the public gathers, and the 48 places of business in the community.
11. Secured the elimination of serious fire hazards in a moving picture theatre. The chimney was too small, open in several places and unlined. The cellar housing the heating plant was too small and contained much combustible material. The projection booth was in bad condition and without any fire extinguishers.
12. Effected the correction of conditions which made the high school a fire trap. The auditorium was heated by two stoves placed directly on the floor without any protection to woodwork. Electric wiring was in a dangerous condition. All windows were covered with heavy wire screens. There was only one exit. Stage and dressing rooms were filled with rubbish. The Board of Education carried out all the recommendations of the volunteer fire department and put the building in first-class condition.
13. Succeeded in having an old and vacant frame school building razed.
14. Turned over the investigation of four suspicious fires to the State Fire Marshal, obtained a confession on one.
15. Established a division of fire prevention in the department. The six men assigned to this bureau are especially trained. They inspect all business property at stated periods, inspect other private property at the request of the owners, do fire prevention educational work, sponsor fire drills in schools and factories, and see that proper precautions are taken at public gatherings.
16. Appointed a committee to try to secure legislation on a building code and to prohibit parking near hydrants and on narrow streets.
17. Observed a spring clean-up campaign during a week in May. Articles were run in the paper on how to prevent fires. Extinguishers were recharged.

Automobile Fires Increasing

Losses in Automobile Fires in Street Are Small But They Mean Work and Danger for Fire Fighters

THE losses on automobiles which are destroyed are the smallest part of the problem presented by automobile fires. Of much greater importance is the added work and danger which these fires bring to fire departments. Ten per cent or more of a typical fire department's work is in extinguishing fires in automobiles and recent statistics indicate that these fires are on the increase. Few of the owners of automobiles who allow the machines to become dirty under the hood, who do not take the trouble to replace worn wiring, or who are careless with gasoline, would wish to put any person in a position of danger. But neglect of such matters may mean a fire department run, and this inevitably means danger to pedestrians and other traffic, and needlessly exposes the firemen themselves to the dangers of traffic accidents. The damage caused by an accident to a piece of fire apparatus going to one automobile fire may be greater than the loss in all the automobile fires which take place in that town or city in an entire year.

There has been a rapid increase in the number of automobile trucks and passenger vehicles in the last decade and, of course, there has been an increase of automobile fires for this reason. In some states, however, the rate of increase of automobile fires exceeds the rate of increase of automobiles themselves. This is hard to explain in view of annual improvements in their design and construction.

Considerable automobile safety research has been done by Underwriters' Laboratories of Chicago. From their studies various recommendations have been made showing how automobile fires may be prevented and bringing about changes in design of automobiles and equipment directed to that end.

According to the records of the N.F.P.A. Department of Fire Record for the last 30 years, short circuits and defective wiring are responsible for nearly 50 per cent of the known causes of automobile fires. Short circuits are caused by wires coming in contact with each other or with some metal part of the car. Sometimes the wires and cables are not of sufficient current carrying capacity or are not properly insulated. Sometimes the insulation breaks down because of age or from being saturated with oil and gasoline. One of the worst things to be combated is vibration, which causes chafing of the insulation and eventually a short circuit.

Another major fire hazard in automobiles is backfire in the carburetor which may produce an intensive flame in the motor compartment. Backfire is due to improper adjustment of the carburetor or sticky or leaky intake valves. In either case a lean mixture is admitted to the cylinders which will burn so slowly that the intake valve may be admitting a second charge before the first is completely burned. The new charge is ignited by the flame of the first and blown back through the manifold and carburetor.

Quite a number of fires are also caused by an overheated motor or a hot exhaust pipe which may set fire to woodwork.

Of course, it is to be expected that many automobile fires are those involving gasoline. The hazard of gasoline lies in the flammability of its vapor, which makes it possible for almost any source of ignition to set it afire. Small electric sparks from wiring or static sparks will do it.

Laboratories' Data.

An Underwriters' Laboratories engineer making tests on a backfire deflector attached to the carburetor. From such research work have come many improvements in automobile fire safety.

International.

In automobile truck fires there is often a greater loss on the load than on the machine itself. In this case, flames from the gasoline tank under the seat quickly destroyed both the truck and its load.

Gasoline vapor is readily ignited by matches or a cigarette. Spilled gasoline under any circumstances is therefore dangerous and is a prominent cause of automobile fires. It figures largely in the losses of life due to automobiles as when a crash occurs the gasoline tank is likely to be ruptured. The spilled gasoline, taking fire, may immediately involve the whole car and make it impossible for occupants to escape or to be rescued.

Gasoline is often used for cleaning motors and mechanics may saturate their hands, arms and even their clothing from working with it. Gasoline may also be spilled on persons as a result of carelessness in filling tanks. When such gasoline takes fire, as it may from any source, serious burns result which often cause death.

How Auto Fires Are Put Out

The following record of one city shows the typical methods fire departments use to extinguish automobile fires. For the most part these fires are handled by extinguishers or chemical or booster lines; only in occasional instances are hose streams employed. The extinguishers used are of all types—soda-acid, carbon tetrachloride, foam, carbon dioxide and other devices all proving effective.

How Extinguished	*No. Fires*	*Percent*
Put out by hand extinguishers	301	49.5
Chemical or booster line	85	14.0
Sand	39	6.4
Water pails	30	4.9
Hose stream	27	4.5
Miscellaneous and no data	126	20.7
Total Fires	608	100.0

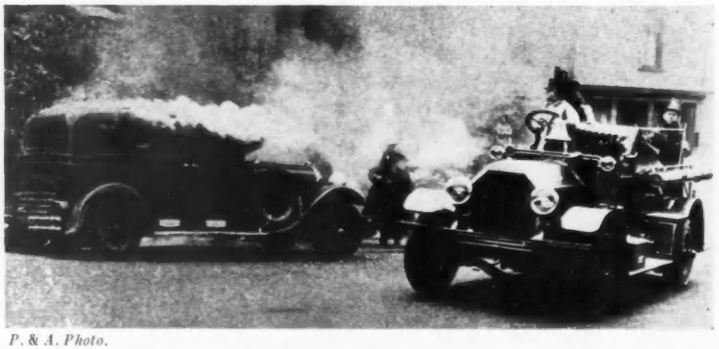
The above statistics show that the practice of many car owners of carrying a small extinguisher is a good one. For use on pleasure cars and small motor trucks the one-quart carbon tetrachloride type appears to be a convenient one to carry and affords reasonable protection. For buses and large trucks, units of larger capacity are generally employed.

Fire Prevention

From the study of fire causes numerous changes have been made in the design and arrangement of automobiles. For one example, the gasoline tank has been placed at the rear where the hazard to passengers in case of spilling or rupture of the tank is lessened. For another, carburetors have been redesigned to reduce chance of backfire, or provided with devices to keep the backfire flame under control.

For the prevention of automobile fires a few simple precautions may be set down.

1. Keep the motor compartment clean.
2. Replace wiring at least once a year. (Wiring a year old is usually not only dangerous as a source of sparks but causes ignition troubles).
3. Do not allow the tank to be run over during filling operations, or gasoline to be otherwise spilled.
4. Do not use gasoline for cleaning the motor or parts during repairs.
5. Do not smoke or permit smoking when filling the tank or near gasoline.
6. Carry a fire extinguisher. (Be sure it bears the label of Underwriters' Laboratories.)



P. & A. Photo.

Automobile fires are responsible for many of the runs made by fire departments. Here the department is arriving in a case where a sedan caught fire as a result of a collision with a ten ton truck.

International.

Many lives may be endangered when a passenger bus takes fire. This one was caused by the ignition of a combustible umbrella handle in contact with its heater.

Wins $10.00 Award on Third Try

Best Fire Stories This Month in Pyrene Prize Letter Contest

By keeping on trying, Carl Irwin, Assistant Hose Director of Hose Company No. 4, Harrisonburg, Virginia, has this month won the first prize in the Pyrene Prize Letter Contest for the letter given in an adjoining column describing a fire put out with fire extinguishers. Mr. Irwin has been a frequent contributor to the contest and has twice been given Honorable Mention for the letters he has sent in. Now he gets the first prize award and ten dollars cash.

The cash prizes in this contest are awarded *every month*, and there is an opportunity for every reader of VOLUNTEER FIREMEN to put himself in line for the money awards. George Neff, Chief of the Fire Department of Grafton, Illinois, who won the First Award last month writes that the money came at a very opportune time for him. He says, "It so happens that your check arrived on my young son's first birthday and I expect to open his first bank account with it".

Send us your story of how an approved fire extinguisher of any make has been used to save life or property. This contest is sponsored cooperatively by the Pyrene Manufacturing Company of Newark, N.J. and VOLUNTEER FIREMEN. Entries are judged by the engineering staff of the National Fire Protection Association and the editors of VOLUNTEER FIREMEN. Until further notice the following cash prizes will be awarded each month: First Prize, $10.00; Second Prize, $3.00; Third Prize, $2.00.

CONTEST RULES

1. Only members of a volunteer fire department may compete in the Pyrene Prize Letter Contest.

2. Letters are to describe actual experiences where any approved fire extinguisher of any make has saved lives or property.

3. Trade names may be used but will be deleted in publication. Publishers reserve the right to edit winning letters to permit publication.

4. Each contestant automatically vouches for the truth of the facts presented from his own or others' experiences.

5. Only one letter may be submitted each month.

6. Letters must be legibly written in ink or typewritten on white paper, one side only. Preference will be given to letters not over 250 words in length.

7. Letters received after the 15th of the month will be judged in following month's competition.

8. Monthly prizes in cash will be: 1st, $10.00; 2nd, $3.00; and 3rd, $2.00.

9. Address contest letter to Pyrene Prize Letter Contest, National Fire Protection Association, 60 Batterymarch St., Boston, Mass.

FIRST PRIZE—$10.00

CARL IRWIN,
Hose Co. No. 4, Harrisonburg, Va.

Three Extinguishers Save $15,000

"A chemical extinguisher once saved valuable property in a local barrel storage room. The watchman, while firing the cast iron heating stove, accidentally upset a box of sawdust on it. It ignited immediately.

"Before the watchman got a soda-acid type extinguisher in action, the ceiling, wall and several barrels were ablaze. However, he succeeded in confining the fire to the room until a chemical truck answered the alarm. By the use of two more soda-acid extinguishers the fire was completely extinguished, saving the building and contents and a nearby dwelling, property valued at nearly $15,000."

SECOND PRIZE—$3.00

H. D. TRACE,
Washington Fire Co. No. 1,
Mechanicsburg, Pa.

Puts Out Gasoline Tank Fire

"While working for a garage near a corner where a gasoline station was under construction, someone from the corner shouted to me to come quick. I ran down and found a fire where two 1,000 gallon underground gasoline tanks were being filled from a tank truck. A gasoline truck driver was badly burned and the fire was going up the hose to the truck.

"I put out the fire on the driver and stopped a passing car and sent him to a doctor. Then I grabbed the carbon tetrachloride extinguisher off the truck and gave each tank two pumps, putting out the fire. The fire was probably caused by static electricity."

THIRD PRIZE—$2.00

B. F. SIMONS, *Secretary*,
Volunteer Fire Dept., Fredonia, N. Y.

Prevents $50,000 Fire Loss

"The driver of a gasoline tank truck was drawing gasoline near the railroad depot into an underground tank when he heard a locomotive approaching. He backed his truck off the tracks without first shutting off the stream of gasoline. Gasoline rushed toward a burning basket of waste paper near the depot. Instantly there was a flash and a line of fire spread to the gasoline truck.

"Grabbing a carbon tetrachloride extinguisher from his truck, a nearby truckman extinguished the fire within one minute saving the truck and the depot."

HONORABLE MENTION

CHESTER SROKA, *Chief*.
Fire Department, Portage, Wis.

JOHN LUX, *Secretary*.
Hose and Engine Co. No. 1, Jessup, Pa.

F. C. VANOVER, *Secretary*.
Norton Fire Department, Norton, Va.

Volunteer Firemen

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Volume 1 **October, 1934** Number 13

FIRE PREVENTION WEEK, October 7-13 Plans for your Fire Prevention Week observance will probably be complete by the time this issue reaches you, but there is still time to work out additional details to increase the effectiveness of the fire prevention campaign you will put on this year.

We are privileged to describe elsewhere in this issue the fine campaign which won statewide recognition for one volunteer fire department—that of Ellicott City, Maryland. Their successful program may provide ideas which you can use to advantage in your community.

The work done during Fire Prevention Week in getting stoves, furnaces and heating plants and chimneys fixed up for the winter's operation, the cleaning out of rubbish and the ridding of your community of fire hazards generally will be well repaid by saving your department many a run during the cold weather of the next few months.

An Invitation to Volunteer Companies Not Yet Members The second year of the Volunteer Firemen's Section of the National Fire Protection Association begins this month. By way of celebration we are making a special effort to reach every volunteer fire company not yet a member to extend to them a cordial invitation to affiliate with this National and International organization devoted to the interests of volunteer firemen. Members are urged to personally extend the invitation to other companies and departments of towns and villages in their neighborhood.

During the summer we have had many letters from company or department officers and men who have seen copies of the magazine and tell us that at the first meeting of their company this fall they are going to bring up the matter of membership and see to the enrolment of the companies.

Therefore, those who are waiting for an invitation, here it is.

Endorsements from Kentucky and Maryland In the "Letters to the Editor" department of this issue will be found notification to us that the Kentucky Firemen's Association went on record at a recent meeting as endorsing the Volunteer Firemen's Section of the N.F.P.A. During September Assistant Managing Director Bugbee was a speaker at the meeting of the Delaware Volunteer Firemen's Association at which a resolution was passed endorsing the Volunteer Firemen's Section and urging the companies in their membership to take advantage of the benefits which the Section and the magazine, VOLUNTEER FIREMEN, can give.

VOLUNTEER FIREMEN in the Coming Year Applications for membership from new companies and departments should come in as soon as possible, so as not to miss any issues of this magazine during the coming year. Those who have been receiving it for the months past know that they may expect a lot of interesting and valuable material which will greatly add to their general knowledge about fires and fire fighting and increase their personal effectiveness as craftsmanlike fire fighters.

During the coming year we will report in these pages every important fire of special interest to volunteers. The accounts will be complete, technically accurate and profusely illustrated. Articles on new fire apparatus, new tools and other phases of fire fighting operations will be presented, which will be based on experience collected over a wide area and from the most competent sources available. New fire hazards and new ways of dealing with old ones will be reported on. We can confidently promise a wealth of valuable material and information available from no other source.

Additional Members During September Since the last issue, volunteer firemen, members of companies and departments listed below have been enrolled as members in the Volunteer Firemen's Section of the National Fire Protection Association. The eleven new departments with 239 members coming in during September make the total membership of the section 6,642 to date.

Dolton Volunteer Fire Department, Dolton, Illinois.

Niles Volunteer Fire Department, Niles, Illinois.

Sudbury Fire Department, Sudbury, Massachusetts.

Scottsbluff Volunteer Fire Department, Scottsbluff, Nebraska.

Adams Township Volunteer Fire Department, Toledo, Ohio.

Lawton Fire Department, Lawton, Oklahoma.

Warrenton Volunteer Fire Department, Warrenton, Virginia.

Puyallup Fire Department, Puyallup, Washington.

Hurley Volunteer Fire Department, Hurley, Wisconsin.

Lake Mills Volunteer Fire Department, Lake Mills, Wisconsin.

Worland Volunteer Fire Department, Worland, Wyoming.

Letters to the Editor

National Fire Protection Association,
Boston, Mass.

Gentlemen:

Please send literature on the Volunteer Firemen's Section to Chief Roland Gifford of the Weston Fire Department, Westport, Conn., R.F.D. 2. They are a new organization in this section and I am positive they will be interested in any information that will be a benefit to them.

The VOLUNTEER FIREMEN is going over big with my own department.

Very truly yours,
C. G. R. PETERSON, *Chief*,
Volunteer Fire Company, No. 1,
Trumbull, Connecticut.

* * *

National Fire Protection Association,
Boston, Mass.

Dear Sirs:

I am sending you the corrected address of one of our members along with the names of three more which I would like to receive the magazine, VOLUNTEER FIREMEN. This makes 23 members in all, and I am enclosing $1.50 to cover the three memberships over the required 20.

I think it is a great magazine and a wonderful help to volunteer firemen. Members of the department are very well pleased with the magazine and can hardly wait for the next issue.

Very truly yours,
ELMER C. TAYLOR, *Chief*,
Fire Department,
Warrensville Heights, Ohio.

* * *

National Fire Protection Association,
Boston, Mass.

Gentlemen:

I am very happy to advise that the annual convention of the Kentucky Firemen's Association was a huge success, having 694 representatives from 61 cities. Most of the cities in this state have either part-paid or volunteer departments and the program was devoted to evolutions beneficial to these departments. The companies taking part in these evolutions certainly made it worthwhile for those attending.

During the business session, the Volunteer Firemen's Section was explained and President Russell Dyche, Chief of the London Volunteer Fire Department, made favorable comments on your magazine. The following resolution was passed:

"Whereas, we review the past and look into the future of fire prevention and fire protection in Kentucky, we recommend that the Kentucky Firemen's Association, by resolution in convention assembled, Resolve: That we approve the Volunteer Firemen's Section of the National Fire Protection Association, and recommend that all volunteer departments of the state join this movement."

As the majority of the departments are volunteer, it behooves this association to assist them in every way possible and I want you to know that when the time comes that I may again be of service to you and your magazine, I want you to feel free to call upon me or the association.

Very truly yours,
W. S. LIPSCOMB, *Secretary*,
Kentucky Firemen's Association,
Lexington, Ky.

* * *

National Fire Protection Association,
Boston, Mass.

Gentlemen:

I received the September issue of VOLUNTEER FIREMEN and have read it with real interest. I thank you for the magazine and we hope in the near future to be able to subscribe to it as a department.

Just now we are planning a Fire Prevention Week campaign and need plenty of help. Our village is small and while we cannot use posters in lots of as many as one hundred I am enclosing an order for a number of posters and pamphlets.

We are starting early with our plans this year and have hopes to be able to put on a real helpful and instructive campaign.

Thanking you, I am
Very truly yours,
R. S. WHITE, *Chief*,
Norwood Volunteer Fire Department,
Norwood, N. Y.

MEMBERSHIP PLAN

Volunteer Firemen's Section National Fire Protection Association

WHERE twenty or more firemen in a volunteer company or department affiliate with the Volunteer Firemen's Section the cost is 50 cents a year *per man*. Each fireman will receive one copy of VOLUNTEER FIREMEN, the monthly journal of the Volunteer Firemen's Section, mailed regularly to his home address. The company or department automatically becomes a member of the National Fire Protection Association and is entitled to full privileges of membership. All the literature regularly issued to N.F.P.A. members is mailed to headquarters of the company or department.

Membership may be applied for by one member of the company or department collecting 50 cents for each of the 20 or more members and making a single remittance for the group, or the company or department may take a membership for its men and make a single remittance from the company or department treasury.

Companies With Less Than Twenty Members

Because of the large amount of material mailed to members, not less than $10.00 can be accepted from any company or department for membership dues. In the case of companies or departments with less than twenty men this means that the cost divided among them will be slightly higher per man. Of course, some such companies or departments may prefer to make a single remittance of $10.00 from the company or department treasury. In other cases a few interested citizens, not members of the company or department, may be glad to contribute 50 cents apiece to make up the required minimum of twenty, so that the members may secure the rate of 50 cents per man.

These companies or departments have full privileges of N.F.P.A. membership as above, and each member receives the monthly magazine, VOLUNTEER FIREMEN, at his home.

Technical Correspondence

Answered by **Robert S. Moulton,**
Technical Secretary

National Fire Protection Association, Boston, Mass.

I would like to ask a question about taking a charged line up into a building. If we were called to a fire and upon arriving at the scene we find that the fire is on the first floor going fairly good, we lay two lines of 2½ inch hose, but within a short time we find that one of these lines can be used to a better advantage on the third floor above. Now then, some say never to take a charged line up more than the second floor, others say never to take a charged line up until you have relieved the pressure by shutting down the gate at the hydrant. But supposing that the hydrant is quite a distance away from the fire, loss of time would have to be considered, would it not?

CHAS. H. ARMSTRONG,
Alert Hose Company, Adams, Mass.

Answer. I think that the advice you have already received not to take a charged line further than into the second floor is probably sound. As you know, a charged line is difficult to handle and it certainly is good advice not to move it any more than is absolutely necessary.

However, there are times when it is necessary to handle a charged line either over the ladders or up stairways and there are several satisfactory methods of doing so. When it is not advisable to shut down a line and it is desired to operate a charged line on a ladder, it is customary for the pipe man to take the pipe by the handle and the second man follows not more than 15 feet behind with hose supported by hose rope. At least two men should be on the ground to feed the line up the ladder. When the desired height is reached, the pipe and hose should be secured in the approved manner and the line straightened out at the foot of the ladder.

When a charged line is to be taken into a building or onto a roof, the hose is handled in much the same manner with men spaced not more than 15 feet apart. If the hose is going in through a window it will be found necessary to have a man stationed at the top and every 15 feet on the ladder as the hose is passed into the building. It is not practicable to pass loaded lines above the third floor of a building. At any height above the third floor time will be saved by draining the line.

As a charged 2½ inch line is very heavy and if the distance which it is desired to move it is considerable, the fastest and easiest way to handle the line is to use a hose clamp to temporarily shut off the line and extend it with the use of dry hose. The nozzle is shifted to the end of the dry section of the line and the clamp is then opened.

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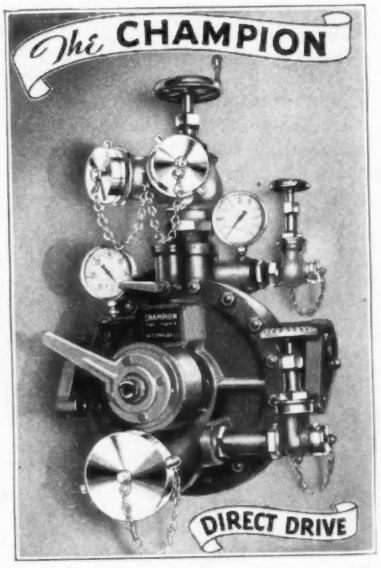

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The University Extension Division is preparing a small bulletin on Home Modernization in which the suggestion was made that space under the basement stairs in dwellings could be made over into a closet. The Superintendent of Buildings and Grounds of the University pointed out that this created a fire hazard. I pointed out that the human race being such as it is, is rather likely to make the space under the basement stairway a place for putting the washing machine, the waste paper basket or the accumulation of mops, brooms and such other rubbish as may be at hand.

If a closet were built in, and finished off, the material might be stored in a somewhat orderly fashion within. There may be some question as to whether an open space under the basement stairs might not prove to be a greater fire risk than a closed closet. I would be pleased to have your comment.

LAWRENCE E. BLAIR,
University of Wisconsin,
Madison, Wis.

Answer. I feel that the Superintendent of Buildings and Grounds is correct in his opinion that a closet under basement stairs is likely to create a fire hazard. If the closet could be made completely fire-resistive, there would be no objection to it, but it is not ordinarily practical to have a closet of fire-resistive construction in dwellings.

Fires starting in the vicinity of the basement stairs are likely to spread quickly to the upper portions of the house and may cut off the escape of the occupants.

I fully realize that the space under the basement stairs may be used for undesirable storage even though it has no enclosure. It seems to be the general feeling, however, that it is much safer to have no enclosure around it. Dangerous accumulations are less likely to occur when they are in plain sight. Furthermore, a fire from spontaneous heating of oily rags, for example, is less likely to escape detection in its incipient stage when in the open than when in an enclosure.

In Addition to VOLUNTEER FIREMEN

In addition to the magazine, VOLUNTEER FIREMEN, *volunteer companies or departments, members of the N.F.P.A. Volunteer Firemen's Section receive at headquarters the publications listed below which are regularly issued to N.F.P.A. members.*

Quarterly Magazine
A chronicle of the Association's activities, with valuable articles on fire prevention, fire departments, special hazards fire statistics, and reports of interesting fires. (An average of 100 pages issued every 3 months).

Proceedings
A record of transactions of the Association at its annual meeting, discussions, reports of technical committees. (1934 volume of 400 pages recently mailed).

News Letter
A bulletin to inform members of the latest developments in the fire field. (Sent members each month).

Year Book and Directory
List of members with addresses, arranged alphabetically and geographically.

Index
Index to all subjects covered in N.F.P.A. publications.

Committee Reports
Thirty-seven technical committees make regular reports on fire subjects. These are printed and issued to members.

Special Bulletins
Numerous bulletins on a variety of subjects are mailed to members from time to time.

Educational Material
Posters and other material for fire prevention campaigns, educational literature, and pamphlets for use of members.

Special information service and other material is also available to members.

National Fire Protection Association
60 Batterymarch St., Boston, Mass.

Announcing . . . .

The Volunteer Fire Company

By William Draper Brinckloe

CONTENTS

I.
Let's Have a Fire Company

II.
Buying the Engine

III.
Hose and Helmets

IV.
Chiefs and Chaplains

V.
Building the Engine-House

VI.
When the Siren Sounds

VII.
Dollars and Cents

VIII.
Brass Buttons

IX.
Safety First

X.
Be it Enacted:

XI.
Getting Together

XII.
Fire Prevention

XIII.
The Private Fire Company

XIV.
Books and Bulletins

The author of this new book describes himself as "an old volunteer fireman from a very old company." He sets forth his dearly bought experience to help his brother firemen. Mr. Brinckloe was the leading spirit in the organization of the Volunteer Firemen's Section. His untimely death prevents his participation in the Section's development, but his forceful character, good judgment and experience lives vividly in the pages of this book. Written for the use of volunteer fire companies, private fire departments, farmers' organizations, civic organizations, women's clubs, firemen's schools, insurance men and citizens generally, it is not in any sense a textbook, but an intensely interesting story of volunteer fire departments and volunteer firemen. A dozen leading fire protection engineers who reviewed the manuscript for technical accuracy all reported they found the text as interesting reading as a good novel and could not put it down until they had read every page.

Mr. Brinckloe as President of the Easton, Maryland, Fire Department, the Maryland State Firemen's Association and other fire fighting organizations, a member of the American Institute of Architects, the American Society of Agricultural Engineers, the American Legion and other organizations and a writer of national reputation, presents this story which is at once fascinating reading and technically accurate. The book is sponsored by the Committee on Farm Fire Protection of the National Fire Protection Association which has reviewed it and finds all its recommendations consistent with the official standards of the Association.

The book is an attractive cloth bound volume of 136 pages with 24 illustrations of volunteer fire department apparatus, equipment and fire fighting methods. The book is published by the National Fire Protection Association at the nominal charge of $1 per copy postpaid.

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